


CURRICULUM VITAE (CV)

Position Title and No.		
Name of Expert :	Soheil Ranjbar	
Date of Birth :	September 21 th , 1985	
Country of Citizenship/Residence	IRAN/IRAN	
Phone Number	(Iran Phone Num. +989111154775)	
Email Address	Ranjbar.slr@gmail.com S.Ranjbar@velayat.ac.ir	
Skype Account	ranjbar.slr@gmail.com	
Academic Position	Assistant Professor	
Affiliation	Department of Electrical Engineering, Velayat University, Iranshahr, Iran	
Goggle Scholar	https://scholar.google.com.au/citations?user=hLtnFgwAAAAJ&hl=en	

1. Education :

Degree	Subjects	Year	Institution & Place
Visitor	Power Engineering (Protection and Dynamic)	2017	Queensland University of Technology, Brisbane, Australia
PhD	Power Engineering (Protection and Dynamic)	2018	Shahid Beheshti University, Tehran, Iran
Master	Power Engineering (Protection and Dynamic)	2012	Science and Research Branch Islamic Azad University, Tehran, Iran.
Bachelor	Power Engineering	2009	Bojnourd Branch Islamic Azad University, Bojnourd, Iran
Associate	Industrial Electrical Engineering	2006	Technical and Vocational University, Babol, Iran.

2. Employment record relevant to the assignment :

Period	Employing Organization and Your Title/Position. Contact Information for References	Country	Main role
2020	Dynamic Vision Company	Afghanistan	Training for Use of Appropriate Software for Power System Analysis
2018	IDRC +989121041201 Prof. Mohammad Reza Aghamohammadi	IRAN	IRAN National Power Grid, Electrical Lead Engineer
2013	KNTU +989125779463 Prof. Turaj Amraee	IRAN	Electrical Lead Engineer
2004-2013	KNTU +989125779463 Prof. Turaj Amraee	IRAN	Electrical Lead Engineer

3. Publications:

Books

- Soheil Ranjbar**, Abdollah Hosseinzadeh, "Automation and SCADA in Power Distribution Systems", Mazandaran Power Distribution Company Press, Mazandaran, Iran, 2019.
- Soheil Ranjbar**, Mohammad Amin Mojavery Agah and Hedyieh Mojavery Agah, "Electrical System, Control and Efficiency in Wind Turbines", Qeddiss press, 1nd ed, 2015, Tehran, Iran. (Translated in Persion).

Under reviewing Papers

1. **Soheil Ranjbar**, Gerard Ledwich and Mohammad Reza Aghamohammadi, "STATCOM- based Intelligent Wide Area Controller for Damping Inter Area Oscillation" (Submitted at Electrical Power System Research (EPSR), Elsevier)
2. **Soheil Ranjbar**, Gerard Ledwich and Mohammad Reza Aghamohammadi, "Intelligent WADC Using CART Technique and Thevenin Impedance by Considering Time Delay Compensation" (Submitted at IEEE Transactions on Power Systems).
3. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi and Farhad Haghjoo, "CART based Wide Area Damping Controller Using Global Inter-area Signal from WAMS" (Submitted at IEEE Transactions on Power Systems)
4. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi and Farhad Haghjoo, "Damping Inter Area Oscillation by CART based Intelligent WADC and Optimal Combination of Generators" (Submitted at IEEE Transaction on Smart Grid) .
5. Iman Sepehrirad, Reza Ebrahimi, Esmail Alibeiki, **Soheil Ranjbar**, "Thevenin Impedance Concept for Fast Detection of Microgrid Islanding Scenarios in the Presence of Small Synchronous Generators", (Submitted to International Transactions on Electrical Energy Systems, Wiley, Under review since 25 Jun 2020).
6. Amir Habibzadeh, Mahmoud Samiei Moghadam, Seyyed Javad Mohammadi Baygi and **Soheil Ranjbar**, "Adaptive Protective Zone for Dynamic Stability of Microgrid Low Frequency Oscillations Consisting of Low-Inertia DERs", (Submitted to International Transactions on Electrical Energy Systems, Wiley, Under review since 14 May Jun 2020).
7. Sahar Roudi, Reza Ebrahimi, Mahmood Ghanbari, **Soheil Ranjbar**, "Online Virtual Inertia Controller for Damping Microgrid Dynamic Oscillations Considering High Penetration of Renewable Energy Sources", (Submitted to Electric Power Components and Systems, Wiley, Under review since 23 March 2020).
8. Amir Habibzadeh, Mahmoud Samiei Moghadam, Seyyed Javad Mohammadi Baygi, and **Soheil Ranjbar**, "Adaptive Protective Zone for Dynamic Protection of Distributed Energy Resources in Microgrid Based on Oscillatory Signals", (Submitted to International Transactions on Electrical Energy Systems, Wiley, Under review since 24 Jan 2020).
9. Seyyed Hamid Hosseini, Masoud Radmehr and **Soheil Ranjbar**, "Online Estimation of Controlled Islanding Time Intervals Using Dynamic State Trajectories through Cascading Failures from WAMS Data", (Submitted to International Transactions on Electrical Energy Systems, Wiley, Under review since March 2020).

Accepted Journal Papers

1. Seyyed Hamid Hosseini, Masoud Radmehr and **Soheil Ranjbar**, "Central Damping Controller for Microgrid Voltage and Frequency Dynamic Stability Using Adaptive Artificial Neural Network", Journal of Control, Automation and Electrical Systems, Published Online: 23 April 2021. <https://doi.org/10.1007/s40313-021-00726-9>.
2. **Soheil Ranjbar**, Ameena S. Al-Sumaiti, Reza Sangrody, Young-Ji Byon and Mousa Marzband, "Dynamic Clustering Model Reduction Scheme for Damping Control of Large Power Systems Using TCSC-based Damping Controller from WAMS Data", International Journal of Electrical Power and Energy Systems (EPES), Vol. 131, April 2021, 107082. <https://doi.org/10.1016/j.ijepes.2021.107082>.
3. Abdollah Hosseinzadeh, Alireza Zakariazadeh, **Soheil Ranjbar**, "Fast Restoration of Microgrids Using Online Evaluation Metrics Considering Severe Windstorms", Sustainable Energy, Grids and Networks, Volume 26, June 2021, 100458. <https://doi.org/10.1016/j.segan.2021.100458>.
4. Sahar Roudi, Reza Ebrahimi, Mahmood Ghanbari, **Soheil Ranjbar**, "Virtual generator-based damping controller for microgrids with low inertia resources based on energy storage systems", International Transactions on Electrical Energy Systems, March 2021. <https://doi.org/10.1002/2050-7038.12832>
5. Iman Sepehrirad, Reza Ebrahimi, Esmail Alibeiki, **Soheil Ranjbar**, " Intelligent Differential Protection Scheme for Controlled Islanding of Microgrids based on Decision Tree Technique", Journal of Control, Automation and Electrical Systems(JCAE), April 2020. DOI:10.1007/s40313-020-00588-7
6. Mohamad Javad Alinezhad, Masoud Radmehr and **Soheil Ranjbar**, "Adaptive Wide Area Damping Controller for Damping Inter-Area Oscillations Considering High Penetration of Wind Farms, International Transactions on Electrical Energy Systems, March 2020. <http://dx.doi.org/10.1002/2050-7038.12392>.
7. Masoud Rezaee, Mahmoud Samiei Moghadam and **Soheil Ranjbar**, "Online estimation of power system separation as controlled islanding scheme in the presence of inter-area oscillations", Sustainable Energy, Grids and Networks-Elsevier, vol.21, March 2020. <https://doi.org/10.1016/j.segan.2020.100306>.
8. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi and Farhad Haghjoo, "A New Scheme of WADC for Damping Inter-Area Oscillation based on CART Technique and Thevenine Impedance", International Journal of Electrical Power and Energy Systems (EPES)- Elsevier, vol.94, Jan 2018, pp 339-353. <https://doi.org/10.1016/j.ijepes.2017.07.010>.
9. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi and Farhad Haghjoo, "Damping Inter- Area Oscillation in Power Systems Using Local PSSs based on Global Control Signals" Tabriz Journal of Electrical Engineering (TJEE), Vol. 47, Issue 3, 2017.
10. Turaj Amraee, **Soheil Ranjbar**, "Transient Instability Prediction Using Decision Tree Technique", IEEE Transactions on Power Systems, VOL. 28, NO. 3, AUGUST 2013. DOI: 10.1109/TPWRS.2013.2238684.

Conference Papers

1. Ali Ahmadi Saeedkhani, Babak Mozafari, **Soheil Ranjbar**, "Controlling Voltage Sags in Transmission Lines by using Modified UPFC," 28th Iranian Conference on Electrical Engineering (ICEE), 4-6 August 2020, University of Tabriz, Tabriz, Iran.
2. **Soheil Ranjbar**, Babak Mozafari, Ali Ahmadi Saeedkhani, "Transient Stability Enhancement by Using Fuzzy-based SMES and Braking Resistor," 5th National Conference on Electrical & Mechatronics Engineering, 14-16 Dec.2019, K.N.Toosi University of Technology, Tehran, Iran.
3. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi and Farhad Haghjoo, "Damping Inter- area Oscillation in Power System by Using Global Control Signals based on PSS devices", 25th Iranian Conference on Electrical Engineering (ICEE), May 2017, KNTU, Tehran, Iran.
4. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi and Farhad Haghjoo, "Real Time Wide Area Damping Control Signal to Damp Inter-Area Oscillation in Power System", 25th Iranian Conference on Electrical Engineering (ICEE), May 2017, KNTU, Tehran, Iran.
5. Mehdi Sajadinia, **Soheil ranjbar** and Zahra Rafiee, "Voltage Transient Instability Prediction of Synchronous Generator Using Bayesian Technique", 4th National & 2nd International Conference on Applied Research in Electrical, Mechanical and Mechatronics Engineering, Feb 2017, Tehran, Iran.
6. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi, Farhad Haghjoo, "Adaptive Wide Area Damping Controller for Damping Inter-Area Oscillations On Power System", 24rd Iranian Conference on Electrical Engineering (ICEE2016), IEEE Conference, May 10-12, 2016, Shiraz, Iran.
7. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi, Farhad Haghjoo, "Determining Wide Area Damping Control Signal (WADCS) Based on C5.0 Classifier", 24rd Iranian Conference on Electrical Engineering (ICEE2016), IEEE Conference, May 10-12, 2016, Shiraz, Iran.
8. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi, Farhad Haghjoo, "Real Time Transient Instability Assessment Based-on Bayesian Theory", 23rd Iranian Conference on Electrical Engineering (ICEE2015), IEEE Conference, May 10-14, 2015, Tehran, Iran.
9. Mohammad Mokhayeri, Mohammad Reza Aghamohammadi, **Soheil Ranjbar**, "Splitting Prediction of Wide Power System to Controlled Islanding Using Decision Tree Technique", 9st Power System Protection Conference 2015 (PSPC 2015), 14-15 Jan 2015, Tehran, Iran.
10. Atefeh Rezaee Kalantari, **Soheil Ranjbar**, Samira GhorbanpourBarforoushi, "Fault Location Detection Using Support Vector Machine Theory", 4st Smart Grid Conference 2014 (SGC 2014), 9-10 Dec 2014, Tehran, Iran.
11. **Soheil Ranjbar**, Mohammad Reza Aghamohammadi "A New Method for Transient Instability Detection of Wide Area Network Based-on SVM Theory", 29st International Power System Conference, 27 Oct 2014, Tehran, Iran.
12. **Soheil Ranjbar**, Turaj Amraee, "Out of Step Detection in Synchronous Generators Using Bayesian Theory", 21st Iranian Conference on Electrical Engineering 2013, 16-18 May 2013, Ferdosi University, Mashhad, Iran.
13. **Soheil Ranjbar**, Turaj Amraee and Babak Mozafari, "Out of Step Detection in Synchronous Generators Using Decision Tree Theory", 27st International Power System Conference 2012, 12-14 Nov, 2012, Tehran, Iran.

5. Research Activities

- 2020-Project, PhD Stu. Supervisor
Online estimation of power system separation as controlled islanding scheme in the presence of inter-area oscillations, Damghan Branch Islamic Azad University.
- 2020-Project, PhD Stu. Advisor
Adaptive Protective Zone for Dynamic Protection of Distributed Energy Resources in Microgrid Based on Oscillatory Signals, Damghan Branch Islamic Azad University.
- 2019-Project, PhD Stu. Advisor
Intelligent Differential Protection Scheme for Controlled Islanding of Microgrids based on Decision Tree Technique, Gorgan Branch Islamic Azad University.
- 2019-Project, PhD Stu. Advisor
Online Virtual Inertia Controller for Damping Microgrid Dynamic Oscillations Including High Penetration of Renewable Energy Sources, Gorgan Branch Islamic Azad University.
- 2019-Project, PhD Stu. Advisor
Adaptive Wide Area Damping Controller for Damping Inter-Area Oscillations Considering High Penetration of Wind Farms, Aliabad Katoul Branch Islamic Azad University.
- 2019-Project, PhD Stu. Advisor
Central Damping Controller for Microgrid Voltage and Frequency Dynamic Stability Using Adaptive Artificial Neural Network, Aliabad Katoul Branch Islamic Azad University.
- 2015- Project Technical Consultant:

Stability of Bangladesh Power System, Monenco Iran Consulting Engineers Co, 2014-2015, Tehran, Iran.

- 2015- Project Technical Consultant:

Master plan of Tabriz Distribution Network, Monenco Iran Consulting Engineers Co, 2014-2015, Tehran, Iran.

- 2013- Project Technical Consultant:

Installation of 25MW distribution generator, Aradan, Semnan Regional Electric Co, 2013, Semnan, Iran.

- 2013- Project Technical Consultant:

Installation of 25MW distribution generator, Jannat Abad, Semnan Regional Electric Co, 2013, Semnan, Iran.

6. Membership in Professional Associations and Publication :

- Reviewer: International Transactions on Electrical Energy Systems (ETEP) Journal (2014-present)
- Reviewer: International Transactions on Electrical Energy Systems (2015-Present)
- Reviewer: IEEE Transaction on Smart Grids, (2017-present)
- Reviewer: IEEE Transaction on Power Systems, (2017-present)

7. Research Interests

- Power System Dynamic and Modeling
- Intelligent Techniques in Power System Modeling
- Smart Grids Security Using Artificial Intelligence Methods
- Damping Inter-Area Oscillation on Power Systems
- Controlled Islanding Schemes on Microgrid Operating Conditions
- Blackouts and Emergency Protective and Control Schemes

8. Academic Experience

- Long term professional course at Afghanistan energy center (Bereshna), Kabul, 2020.
ETAP trainer .
- Short term professional course at power and water industry education center, Iran, 2018-present.
DigSILENT (DSL), DigSILENT (DPL), Transmission line design software (PLSCADD), Load forecastin.
- Research Assistant at Shahid Beheshti University, 2013-2016
Power System Analysis I & II, EHV Transmission Line Design, Power System Protection, Power System Analysis Lab.
- BSc Courses at Training and Vocational University (TVU), Babol, Iran, 2017-Present
Linear Control Sys and Lab, English Technical Language, Project. Linear Control System
- BSc Courses at Training and Vocational University (TVU), Mahmudabad, Iran ,2017-Present
Power System Analysis, High Voltage Insulator, Substation Equipment.
- BSc Courses at Shomal University,2013-2014
EHV Transmission Line Design, English Technical Language, Electrical Current I & II, Linear Control System
- BSc Courses at Islamic Azad University , 2014-2016
HV Substation Equipment, Electrical Machine I & II, Electrical Current I & II, Linear Control System Lab
- BSc Courses at HARAZ Higher Education Institute,2010-2014
Power System Analysis I & II, Electrical Current I & II, Electrical Machine III, Industrial Control (PLC-SIEMENSE)

9. Software Expertise:

- Power Engineering: DigSILENT , PSCAD. ETAP.
- Industrial Engineering: Simatic Manager step-7 (SIEMENSE), Fluidsim (Pneumatic).
- Mathematic and Optimization: MATLAB, GAMS (General Algebraic Modeling System).

10. Language Skills (Indicate only Languages in which you can work):

Level of Proficiency (mother tongue, excellent, good, fair, poor)			
Language	Speaking	Reading	Writing
English	Good	Good	Good
German	Medium	Medium	Medium
Persian	Excellent	Excellent	Excellent

11. Referees

- ❑ **Dr. Mousa Marzband**
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Email: Mousa.Marzband@Northumbria.ac.uk
- ❑ **Dr. Mohammad Reza Aghamohammadi**
(Ph.D's thesis supervisor)
Associate Professor in Electrical Engineering Faculty, Shahid Beheshti University (SBU)
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- ❑ **Dr. Turaj Amraee**
(Master's thesis supervisor and Ph.D's thesis advisor)
Associate Professor in Electrical Engineering Faculty, K.N. Toosi University of Technology (KNTU)
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Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available, as and when necessary, to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.

Soheil Ranjbar
{19/ Sep/2021}

